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## Special Fisheries Edition

# Montana Fish, Wildlife & Parks

INSIDE  
TRACKS

STATE DOCUMENTS COLLECTION

The Newsletter of Region One

Volume 4, No. 4

July/August, 1994

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### Selective Harvest...

## "Love 'em and Leave 'em"

Donna Clark accomplished something most anglers only dream about. She caught a beautiful 19 pound rainbow trout from the Kootenai River. Then she did something many anglers would never dream about.

She turned it loose.

Donna says, "If people don't turn some fish loose, pretty soon there won't be anything left to fish for. We love to fish and we turn all our fish loose so hopefully our children and grandchildren can enjoy the fishing we do."

About ten percent of the waters in Region One have special regulations that require anglers to turn some or all of their fish loose. On the remaining waters the attitude has generally been "catch a limit" or "keep the big ones, let the little ones go to grow up." But increasingly, anglers are choosing to turn loose some portion of their catch.

Although strict catch and release does not appeal to all anglers, a new concept of "selective harvest" as coined by "The In-Fisherman Magazine" makes sense to both anglers and biologists. Most fish populations have lots

of little fish and a few big fish. A creel survey on the South Fork Flathead River showed that cutthroat over 12 inches made up only 10 percent of the population, but over 30 percent of the harvest. Obviously anglers were selectively harvesting—but maybe not in the best way. Subsequent special regulations dramatically increased the number of big fish but regulations aren't always desirable.

Selective harvest encourages anglers to voluntarily keep mostly small fish to eat because they're more numerous, generally better to eat, and

Nature compensates for their harvest by increasing survival of the remaining fish. Selective harvest also encourages you to release most big fish to preserve breeding stock and faster growing fish and to maintain quality fishing for yourself and other anglers.

If you want to legally keep an occasional big one for a wall mount, a barbecue, or because it's injured, no problem, but most go back for another day.

Give selective harvest a try. You'll help the fishery and your angling future. ☺

**CATCH AND RELEASE.**  
Angler Donna Clark has a quick photo taken to commemorate the 19 pound rainbow trout she caught from the Kootenai River. Clark then released the fish.

Selective harvest encourages anglers to keep mostly small fish to eat because they are generally better eating and because releasing big fish preserves breeding stock and faster growing fish, helping to maintain quality fishing.



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### BASS BOOSTER

FREE COPY

PLEASE HELP YOURSELF

## Fishin' Tips

The following resources are available at the Kalispell regional headquarters:

- Valley Floor Lake Stocking List
- Mountain Lake Stocking List
- Fish Identification Guide (50¢)
- Lake Contour Maps
- Monthly Fishing Guide
- Lake Whitefish Tips and Recipes

- Fish Species Distribution Guide
- Thompson Chain of Lakes Map and Guide
- Northwest Montana Fishing Opportunity Map
- Popular Lakes Fishing Guide
- Popular Streams Fishing Guide

# Just Fishin' Around...

(The following are questions we hear every week from anglers.)

**Q.** Why is FWP putting so much effort into kokanee plants in Flathead Lake? Isn't it a waste of time and money?

**A.** Flathead kokanee served anglers well for more than 80 years, providing 100,000 days of fishing or about 20 percent of the total regional fishing pressure each year. The salmon also supported a trophy lake trout fishery, provided a buffer for native trout from predation and angling and provided \$8 million annually to local businesses. Montana Fish, Wildlife & Parks (FWP), the Confederated Salish and Kootenai Tribe and a lot of anglers think the salmon deserve a chance at recovery before they're abandoned.

**Q.** Why did the salmon disappear so rapidly? How can FWP get them back?

**A.** Salmon actually started declining in the mid-1960s. Changes in operations at Kerr and Hungry Horse dams eliminated or severely altered most of the lake and river spawning, respectively. Then anglers started taking a bigger portion of what was left. Last of all, lake trout always ate a lot of kokanee. Lake trout increased in the 1980s due to the introduction of *Mysis* shrimp and predation proved to be the final straw for the beleaguered kokanee. Limit reductions and seasonal closures by FWP were too little, too late.

River flows are now moderated, angling harvest is curtailed and harvest on lake trout has been increased. *Mysis* numbers are way down so food (zooplankton) is more plentiful, and the Creston Hatchery is planting yearling 7" salmon to reduce predation. The big question now is whether any kokanee can survive lake trout predation long enough to spawn and reestablish the fishery.

**Q.** If FWP wants the salmon to spawn, why don't you plant the salmon in the river so they'll know where to go?

**A.** The main question right now is whether kokanee can overcome lake trout predation in the lake. Planting them in the river would force them to run another gauntlet of predators such as squawfish and further reduce the chances of success. The salmon are imprinted on Mill Creek, the Creston Hatchery water supply. Kokanee are also great pioneers and if they survive they will find suitable places to spawn.

**Q.** I've heard walleyes are great. Why doesn't FWP plant them here?

**A.** Walleyes are popular and we get requests for them every week. Because of the demand, FWP contracted an independent review of the effects of walleye stocking in 1989. Several national experts concluded, based on actual case histories, that walleye mixed with trout and salmon would dramatically impact or eliminate the trout/salmon. That's a problem in Region One because many lakes are interconnected by rivers. Our experience has also been that fish planted in one place are illegally transplanted to nearby waters. The end result—ruined trout and salmon fisheries, wiped out perch fisheries, stunted walleyes, higher management costs and unhappy fishermen. Due to the risks and irreversible impacts, the Montana Fish, Wildlife & Parks Commission voted in 1989 to ban walleye plants west of the Continental Divide.

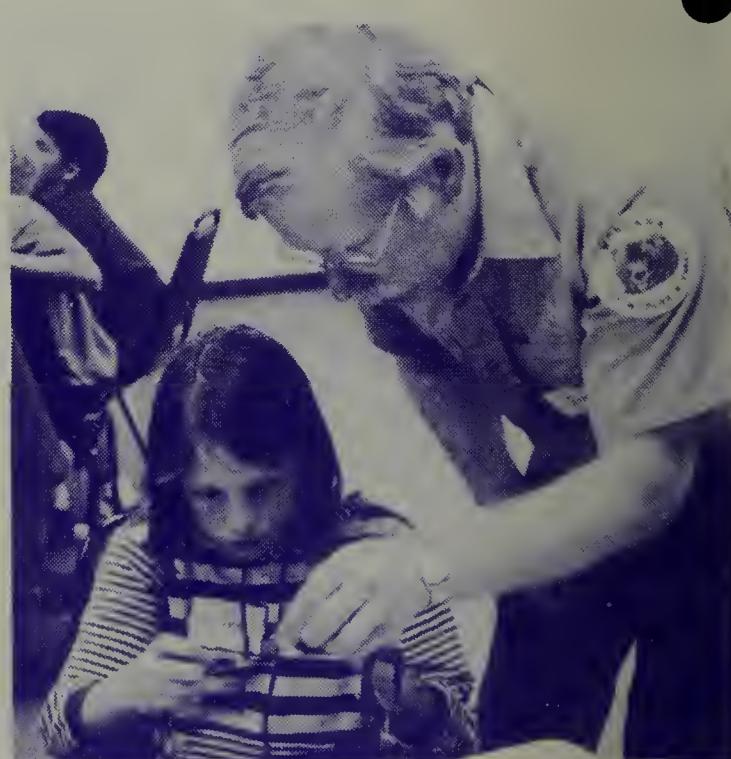
To prove the point, there have been six documented illegal transplants of walleyes since then.

We get lots of calls from anglers who think they've caught a walleye. Check the fish's mouth. If it's got teeth, give us a call. If it's toothless, you've probably got a squawfish which looks similar.

**Q.** Why doesn't FWP provide more variety fishing like

they do in other states?

**A.** Anglers in northwest Montana can currently fish for 16 species of warm and coldwater gamefish as well as 4 species of panfish. But regional waters are relatively unproductive and can't support great numbers or diversities of fish. Along with biological limits come restrictions on what can be introduced in waters co-managed by the State of Idaho, British Columbia, Glacier National Park and the Confederated Salish and Kootenai Tribe. Last of all, the region is home to many important native species. Habitat loss and introduced species are the biggest threats to native species and the Endangered Species Act will be a large factor in new introductions. Fish managers will continue to introduce new fish where feasible but people who irresponsibly and illegally transplant fish to new waters further limit options.



**ANSWERING QUESTIONS** is just one of the jobs of Regional Fish Manager Jim Vashro. Here Jim helps a student in one of the Angler Education Classes. The questions Jim gets cover topics from fish planting to varieties offish to "Why don't we have better fishing here?" Jim is happy to answer questions at group meetings, in classes, and individually.

# Questions Anglers Ask

**Q.** Why don't we have fishing here like they do in Canyon Ferry? (Or the Missouri River, Blackfoot Reservation, etc.)

**A.** The basic geology of northwest Montana provides few nutrients to drive the food chain. If you think about the productive waters you fish elsewhere they either have lots of weeds or greenish colored water (algae) from all the nutrients. Our waters are clean and may be pretty to look at, but they produce fewer pounds of fish. So we grow fewer fish, smaller fish, or both. Region One fish also take longer to grow to desirable size. With angling pressure and harvest increasing, it's unlikely many of our fish will survive to trophy size.

**Q.** Why did FWP plant so many northern pike? Aren't they a real problem?

**A.** FWP has never stocked pike in Region One. Pike were illegally transplanted from Lake Sherburne to Lonepine Reservoir in 1953 and appeared in Echo Lake about 1970. They are now found in over 60 waters due to migration and further illegal trans-

plants. Contrary to popular myth, it is extremely unlikely pike eggs are carried about on birds' feet.

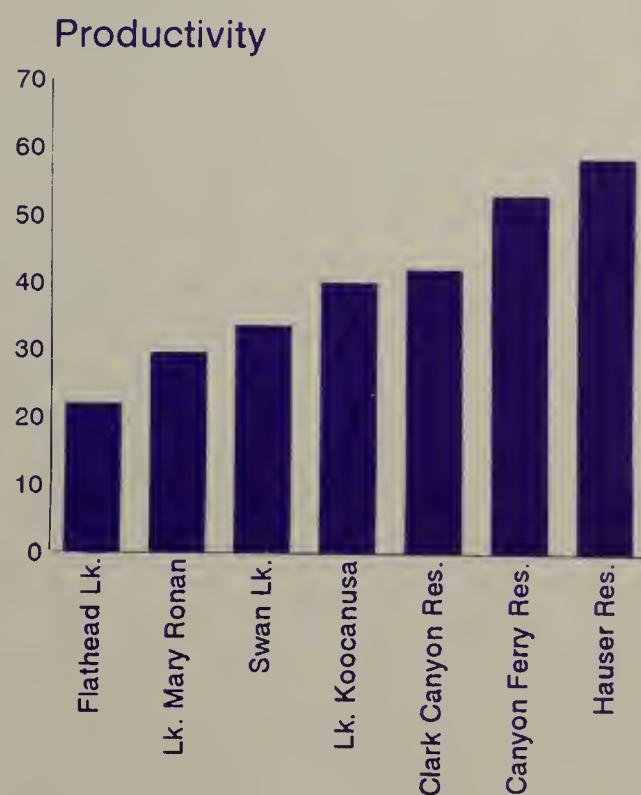
Pike are a major predator but their impact is lessened because they inhabit the weedy margins of lakes and eat the fish that live there (suckers, squawfish, etc.). About 10-20 percent of their diet may be trout or salmon in some seasons. Walleyes would pose a much larger threat because they're more prolific and inhabit the deeper areas of the lake where trout and salmon live. The walleye's little cousin, the yellow perch, is the biggest nuisance in Region One. It occurs in about 60 lakes, causes problems almost everywhere it's found and provides good fishing in only five or six lakes.

P.S. Pike don't lose their teeth each

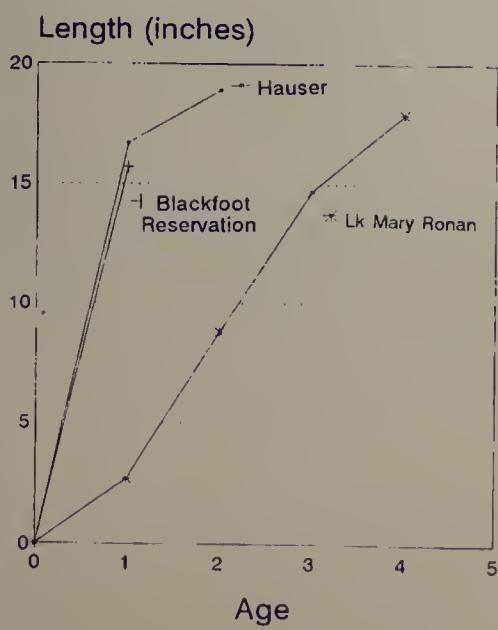
spring. The gums may swell right after spawning so the teeth are hard to see but they're still there.

**Q.** What about the 50 pound pike and 45 pound bull trout FWP shocked up? (Continued on Page 4)

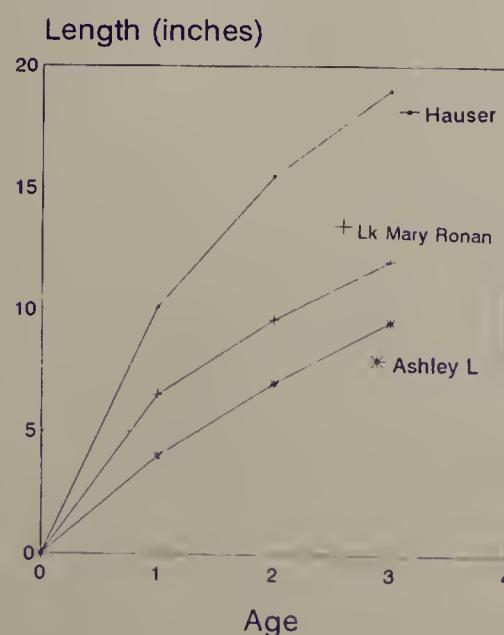
## Productivity Index



## Rainbow Trout Growth



## Kokanee Growth



*GRAPHS on this page and the next illustrate the situation with fish productivity in northwest Montana.*

*Fish productivity is limited by the small amounts of nutrients in the water, the cold water temperatures and the short growing season.*

*Therefore, anglers will generally find fewer fish and smaller fish in these waters.*

# Questions (continued)

(Continued from Page 3)

A. These are interesting stories we hear a lot, but the truth is we've never sampled any fish surpassing any of the existing regional records. Of course, we've never shocked up the Flathead Lake Monster either and there were 13 sightings in 1993. Hmmm.

Q. Fishing in my favorite lake is really going downhill. Why don't you plant more fish?

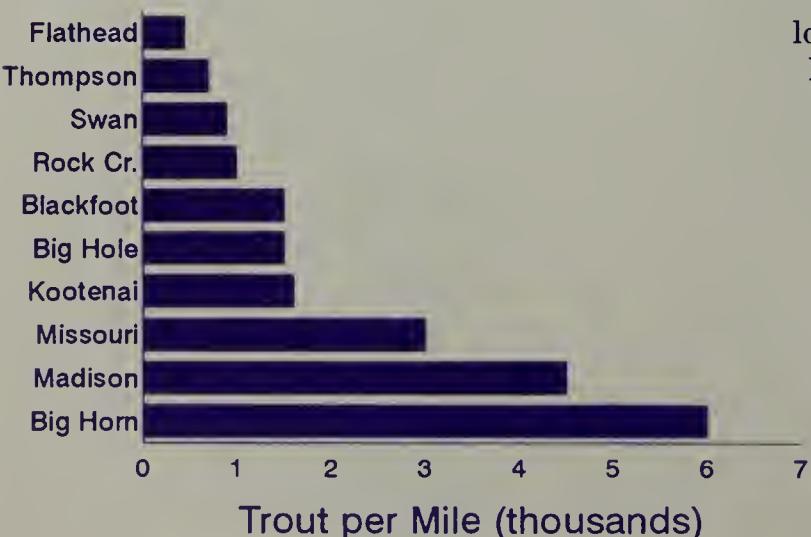
A. Stocking rates attempt to balance lake volume, angler harvest, productivity, fish survival and management goals to produce the desired combination of fish size and catch rates. The existing stocking program is a blend of biology and 30 years of trial and error.

In some cases we can plant more fish if harvest is increasing. But if habitat is going downhill, the lake is full of rough fish or if the lake is just at capacity, more plants won't help. A specific lake can only produce so many pounds of fish—whether it's a few big ones or lots of little ones.

It's the same principle as grazing cows in a pasture—fish are animals, too. If the lake is already at capacity, adding more fish will either mean that all the fish grow slower or the surplus will die.

## Trout Per Mile

### Rivers



On Whitefish Lake, FWP varied the stocking rate between 100,000 and 600,000 kokanee and 50,000 to 250,000 cutthroat and saw no increase in the fishery. In Lake Mary Ronan, increasing the salmon plant by 100,000 kokanee increased the catch rate—but the salmon were one inch smaller.

The result in both cases? Higher costs and less fishing opportunity. If the bottle is already full you can't pour more into it.

Q. What's a trophic level? Does it have something to do with trophies?

A. Sort of. A trophic level is an organism's level in the food chain. There's about a 90 percent loss of energy in transfers between each trophic level or to put it another way, it takes about 1,000 pounds of zooplankton to grow 100 pounds of kokanee to produce a 10 pound kamloops rainbow. So anglers that concentrate on top predators like lake trout, bass or pike might get more thrills but they'll have to settle for a lot fewer fish.

Q. I think it would be great to have my own private pond. Any problems?

A. There are several thousand private ponds in Montana and they provide some great fishing. But ponds are also a great deal of work. If you have suitable soils and adequate water you'll still need a FWP private pond permit to determine the fish you can plant, a water right and probably several permits to build the pond.

After that, figure on lots of weed control, regular purchases of fish and the possibility of summer or winter kill. FWP doesn't provide technical assistance on private ponds but we do have some literature available and there are some private consultants to help. ☀

# Fishing

**ANGLER EDUCATION CLASSES** For youths 10-12 years of age drew enthusiastic students from around the Flathead Valley. One of the 23 students (#3) in the June 1-4 Polson Class, organized by Tom Gilmore of Tom's Tackle, completes his first artificial fly.

Some of the 40 students in the June 21/22 Kalispell class "cut up" during fish dissection (4) and listen to warden Brian Sommers talk about fishing ethics during the field day (#5).

The Kalispell kids caught more than 400 perch, pumpkinseed and trout at a local lake during their field day (#6) releasing most of their fish.

Many volunteers, including Steve McGuire, Jerry Smalley, Roy Hassinger, Bob Domrose, Laney Hanzel, Ed Hula and Trent Miller helped put on the course.



(3)



(4)

# Education and Fishing Fun!



(1)



(2)



(4)



(5)

**FISHING WITHOUT BARRIERS:** Montana Charter-boat Association President Mike Pitzen (#7) of Glacier Fishing Charters leads one of the seven charter boats that hosted 30 anglers with disabilities on the June 16 Fishing Without Barriers Day on Flathead Lake.

The event provided a quality fishing experience for those who normally don't get the chance.

Other charter boat captains included: Shorty Goggins of A-Able Fishing; Mike Patterson of Fishing Fever; Jim Landwehr of Glacier Fishing; Jeff Rach of Flathead Lake Charters; and Craig Renfroe and Russ Tindale of A-1 Fishing. Jim Tebay of Woods Bay Marina provided facilities, and Gary Fend drove a support boat.

Many volunteers from the FWP Crossing the Barriers Committee helped make the event possible. The 30 anglers with disabilities caught 26 lake trout (#8) and 1 bull trout (released)—not bad! The day ended with a cookout at the Marina.



(7)



(8)

# New Fish...

## BIG FISH, LOTS OF 'EM

Region One is the home to 14 of 52 state record fish, from the smallest (pygmy whitefish) to the second largest (white sturgeon).

Species	Weight	Angler	Year	Location
Arctic Grayling	3.21 lbs.	Frederick C. Dahl	1994	Handkerchief Lake
Black Bullhead	2.33 lbs.	Darwin Zempel, Jr.	1994	Lower Flathead R.
Bull Trout	25.63 lbs.	James Hyer	1916	Unknown
Lake Trout	42.00 lbs.	Dave Larson	1979	Flathead Lake
Largemouth Bass	8.16 lbs.	Juanita A. Fanning	1984	Milnor Lake
Mountain Whitefish	5.09 lbs.	Mervin "Frog" Fenimore	1987	Kootenai River
Northern Squawfish	7.88 lbs.	Darrel Torgrimson	1991	Noxon Rapids Res.
Peamouth	0.64 lbs.	Gordon Stewart	1991	Ashley Creek
Pygmy Whitefish	0.16 lbs.	Orin Iverson	1982	Ashley Lake
Pumpkinseed	0.95 lbs.	Tim Colver	1985	Milnor Lake
Rainbow Trout	29.02 lbs. <sup>1</sup>	Stanley Ross	1991	Kootenai River
Rainbow Cutthroat Hybrid	30.25 lbs. <sup>2</sup>	Pat Kelly	1982	Ashley Lake
White Sturgeon	96.00 lbs.	Herb Stout	1968	Kootenai River
Yellow Perch	2.37 lbs.	Vernon Schmid	1988	Ashley Lake

<sup>1</sup>Former World Record

<sup>2</sup>Existing World Record

The list includes several world record class fish. Note that many records are fairly recent. The grayling record fell twice in one week last June with fish from Sylvia and Handkerchief Lake. And, Darwin Zempel caught three bullheads in one day that eclipsed the record 1.95 pound bullhead taken the year before from Ninepipe Reservoir. A lake trout caught in 1992 probably surpassed the existing record but it lost crucial ounces in a six hour delay before weighing. And a 35 pound northern pike from the Whitefish River in 1990 was just one good meal away from the 37.5 pound state record.

A 20 pound rainbow caught in 1952 in Cliff Lake held the state record for 40 years. Since 1990, biologists have recorded at least 6 rainbows between 22 and 29 pounds from the Kootenai River and Little Bitterroot Lake as the result of kamloops trout introductions. Those were all surpassed by a 31 pound rainbow found dying in the Kootenai. The plants have not peaked yet so there may be a trophy out there with your name on it.

If you think you've caught a record fish, keep it cool and moist and have it weighed as soon as possible on a **certified** scale with **witnesses**. Have the species identification verified by a FWP employee. If you want a mount do not cut the fish. If you can't get to a taxidermist immediately, keep it cool and moist, powder it with pure borax (available in grocery laundry sections) and freeze it in airtight wrapping such as a wet towel and freezer paper. 

New fish introductions are the most common request from anglers looking for new challenges and opportunities. Opportunities for new introductions in northwest Montana are limited by natural low productivity, the threat of illegal transplants, impacts on native fish species and intermingled jurisdiction with other states and agencies. Fish managers now have to complete extensive environmental analysis for new introductions which slows the process. However, new introductions are still made where appropriate. The following introductions have occurred in the last ten years:

**Smallmouth Bass** - Planted in Noxon Rapids Reservoir. They are now self-sustaining and one of the state's top bass fisheries. New stock was planted in Horseshoe Lake (Ferndale) to rejuvenate the fishery.

**Largemouth Bass** - New strains of bass have been planted in Middle and Lower Thompson, Island, Flathead, Echo, Abbott, Peterson lake, Lake Mary Ronan, Church Slough and Noxon Rapids, Cabinet Gorge, Ninepipe, Pablo and Kicking Horse reservoirs to improve genetic diversity.



**CLAIMING THE STATE RECORD** is Frederick C. Dahl. Dahl caught this 3.21 pound grayling from Handkerchief Lake. Tina Cruz had held the record for one week with a 2.77 pound Sylvia Lake grayling before Dahl made his catch.

# Introduction Opportunities Limited

city and stock performance. Populations were augmented in Murphy and McGilvray lakes and Murphy showed considerable improvement.

**Lake Trout** - Introduced into Tally Lake to reduce stunted salmon and provide more fishing.

**Brook Trout** - Planted in Beaver Lake to add diversity to this rainbow fishery.

**Grayling** - Planted in Corona Lake because grayling can better withstand winterkill conditions. Red Rocks strain planted in Rogers Lake to form a new genetic reserve.

**Kokanees** - Introduced into Upper Foy and Dickey lakes, Hubbart Reservoir and Lake Five. Foy Lake suffered winterkill. Hubbart did well at first but is failing with increases in shiners and perch. Dickey Lake is a hot new fishery.

**Brown Trout** - Planted in the Clark Fork and Upper Thompson rivers, Middle and Lower Thompson lakes to prey on rough fish. The plants have provided only minimal fisheries and no rough fish control.

**Rainbow Trout** - Several strains are being planted to take advantage of different strain performance as noted below:

**Kamloops (Girrard)** - Planted in Bull (Troy), Bull (Stryker), Dickey, Little Bitterroot, Moran, Sophie, Swisher, Track, Lower Dickey and Lower Blossom lakes and Lake Koocanusa to control rough fish and provide trophy fishing. Kamloops have not provided rough fish control. They have provided good catch rates on medium-sized fish in most lakes and trophies from Little Bitterroot and Dickey lakes and a few others. Lake Koocanusa has not performed as expected but catches of large fish are increasing.

**McConaughey** - This predacious rainbow was planted in Spencer to control pumpkinseeds but failed so it was discontinued.

**Eagle Lake** - Planted in Upper Foy, Bootjack (Whitefish), Frank, Timber and Metcalf lakes. Has not proven to be predacious as expected. Long lived, hard to catch but grows to a large

(5-10 lb.) size. Very tolerant of alkaline waters and are experimentally planted in five more lakes in Eureka area that are now barren.

Fish managers are trying to provide more variety fishing where opportunities exist. But some of even the best planned introductions produce unexpected results. Planting *Mysis* was not one of our better ideas!

"Bucket biologists" who illegally transplant bypass all the analysis and are causing major problems and increased costs.

Some of the strangest illegal transplants that have shown up recently were a (mean) 25 pound snapping turtle, a live starfish and a dead puffer. C'mon guys, give the fish a break! 

## Region One Planting Program

Region One has 509 lakes with fish populations.

Trout Lakes	Self-Sustaining	116
Trout Lakes	Stocked	230
Trout/Bass Lakes	Self-Sustaining	8
Trout/Bass Lakes	Trout Stocked	13
Bass Lakes	Self-Sustaining	34

There are 367 lakes with trout of which 243 are stocked. Thirty-four lakes have bass and the remaining 108 lakes are private, contain other species (northern pike, yellow perch) or are unclassified. The species breakdown and approximate number of fish planted each year are:

Species	No. Lakes	No. Fish
Rainbow Trout		
Arlee	46	228,000
Eagle Lake	5	40,000
Kamloop	8	28,000
Westslope Cutthroat		
Valley Floor	23	184,000
Mountain Lakes	133	80,000
Brook Trout	8	10,000
Brown Trout	3	10,000
Kokanees	13	2,000,000
Grayling	6	150,000
Rainbow x Cutthroat Hybrid	1	20,000
Largemouth Bass	3	100,000

Streams are not stocked other than to establish new populations or spawning runs. Stream stocking was discontinued 20 years ago when it was shown plants actually reduced fishing opportunity. Wild fish management with habitat protection and regulations is producing more fish in the long run at a lower cost to anglers.

Summaries of the valley floor and mountain lake stocking programs are available on request. Comments and suggestions are always welcomed.

# BASS Booster

Kalispell bass angler Steve McGuire was recently recognized by FWP Director Pat Graham for McGuire's efforts on behalf of bass fishing in Montana. Graham noted that McGuire was a founder of the Montana BASS Federation and served as its president for six years. McGuire

has been active in efforts to protect and enhance fish habitat, promoted a state-wide initiative against illegal fish transplants, campaigned for conservative fishing regulations, and served on several advisory boards.

McGuire has been particularly active in angling education, organizing the first state Kids' Fishing Clinic and as an instructor in the first Youth

Angling Education Class.

Graham noted that McGuire's efforts had promoted both bass fishing and angling in general in Montana. McGuire is manager of the sporting goods department at the Kalispell KMART. Steve doesn't intend to rest on his laurels but does hope to fit in a little more bass fishing in the future. ☺

## Hunters:

Mark your calendars! Free Advanced Hunter Responsibility Workshops will be held in conjunction with sporting club meetings as follows:

**Thursday, Sept. 8** - Flathead Wildlife, Inc. 7-10 p.m., FWP Headquarters, Kalispell.

**Tuesday, Sept. 20** - Libby Rod & Gun Club, 7-10 p.m., First National Bank Building, Libby.

The speaker at both workshops will be Jim Posewitz, author of "Beyond Fair Chase," a new book on the ethics and traditions of hunting. Free copies of the book for all participants! ☺



**BOOSTER AND EDUCATOR.** Kalispell bass angler Steve McGuire has been active in many ways to promote bass fishing and angling in general in Montana. Here Steve helps instruct an angler education class. He also organized the first state Kids' Fishing Clinic, and has worked toward protecting and enhancing fish habitat.

**INSIDE TRACKS** is published by Region One



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